

ABSTRACT OF THE DISCLOSURE

On a glass substrate (10), an insulating protective layer (11) comprising SiO_2 film is formed, and an active layer (12) comprising a p-Si film (12) is formed thereon. Further, a first gate insulating film (13) comprising an SiN film which serves as a lower layer and a second gate insulating film (14) comprising an SiN film which serves as an upper layer are stacked thereon. The second gate insulating layer (14) is then removed by etching with a gate electrode (15) formed thereon acting as a mask. Thus, ions can be doped only through the first gate insulating film (13) to the p-Si film (12) with a low acceleration energy.